Genus Vanessa

Egg. — Short, ovoid, broad at the base, tapering toward the summit, which is broad and adorned with a few narrow, quite high longitudinal ridges, increasing in height toward the apex. Between these ribs are a few delicate cross-lines. They are generally laid in large clusters upon twigs of the food-plant

Caterpillar. — The caterpillar moults four times. In the mature form it is cylindrical, the segments adorned with long, branching spines arranged in longitudinal rows; the spines much longer, and branching rather than beset with bristles, as in the genus *Grapta.* It lives upon elms, willows, and poplars.

Chrysalis. — The chrysalis in general appearance is not unlike the chrysalis of *Grapta.*

The genus is mainly restricted to the north temperate zone and the mountain regions of tropical lands adjacent thereto. The insects hibernate in the imago form, and are among the first butterflies to take wing in the springtime.

'(lT 'Vanessa j-album, Boisduval and Leconte, Plate XIX, Fig. 9, ? (The Compton Tortoise).

Butterfly. — No description is required, as the figure in the plate will enable it to be immediately recognized. On the under side of the wings it resembles in color the species of the genus *Grapta,* from which the straight edge of the inner margin of the primaries at once distinguishes it. It is a very close ally of the European *V. van-album.* Expanse, 2.60-2,75 inches.

The caterpillar feeds upon various species of willow. It is a Northern form, being found in Pennsylvania upon the summits of the Alleghanies, and thence north to Labrador on the east and Alaska on the west It is always a rather scarce insect.

(j^Vanessa californica, Boisduval, Plate XX, Fig. n, 3 iffhe California Tortoise-shell).

Butterfly. — On the upper side deep fulvous, mottled with yellow, spotted and bordered with black. On the under side dark

brown; pale on the outer half of the primaries, the entire surface marked with dark lines and fine striae. Expanse, 2.00-2.25 inches.

Early Stages. — The larva and chrysalis have been described by Henry Edwards in the " Proceedings of the California Academy of Sciences," vol. v, p. 171. The caterpillar feeds upon *Ceanothus thyrsiflorus.*

This insect is a close ally of the European *V. xanthomelas.*

It ranges from Colorado to California and as far north as Oregon.